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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,428	08/05/2003	Taku Ishizawa	405507/0012	8311
7590	03/15/2005			EXAMINER STEWART JR, CHARLES W
Lawrence Rosenthal Stroock & Stroock & Lavan LLP 180 Maiden Lane New York, NY 10038			ART UNIT 2853	PAPER NUMBER

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AC

Office Action Summary	Application No.	Applicant(s)
	10/634,428	ISHIZAWA ET AL.
	Examiner	Art Unit
	Charles W. Stewart, Jr.	2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on Remarks filed November 2, 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-10 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 04 August 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/2/04, 8/5/04, 8/4/04

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Murray et al. USP 5,610,635.

With regards to claims 1 and 8, Murray et al. discloses a circuit board having a storage device for storing data relating to a marking material for print, said circuit board comprising: at least two ground terminals arranged on said circuit board at two edges thereof that are located on one axis thereof; and a plurality of terminals arranged on said circuit board, for read/write (fig. 6, element 5, 7 in terms of read, write) operations on said data relating to a marking material for print (fig. 6, elements 90 “GND), 106 “GND” in terms of at least two ground terminals).

With regards to claim 2, wherein said plurality of terminals and said ground terminals are arranged in a single row, with two of said at least two ground terminals being located at the outermost ends of said row (fig. 6, element 98, 102).

With regards to claim 3, wherein said plurality of terminals are arranged to form a plurality of rows, with two of said at least two ground terminals being located at the outermost ends of one of said plurality of rows (col. 10, lines 17-24).

With regards to claim 4, wherein said plurality of terminals include a clock signal terminal, said clock signal terminal being located between two of said at lease two ground

terminals (col. col. 7, lines 32-37 in terms of clock signal).

With regards to claims 5 and 9 wherein said plurality of terminals include a power supply terminal, two of said at lease two ground terminals being located at the outermost ends of a row different than the row that contains said power supply terminal (fig. 6, element 92 in terms of PWR supply terminal).

With regards to claim 6, wherein said plurality of terminals include a power supply terminal and a control signal terminal, and said at least two ground terminals are not the terminals in closest proximity to said power supply terminal (fig. 6, elements 92 “ $\pm 15v$ ”, 10 “ $\pm 5v$ ”, 8 “ $\pm 5v$ ”).

With regards to claim 7, wherein said pluralities of terminals are arranged at intervals of approximately 1 mm in the direction of formation of said rows (fig. 6, element 78 – in terms of interval of approximately 1mm in the direction of formation said rows as shown).

With regards to claim 10, wherein said plurality of terminals include a clock signal terminal, a control signal terminal (col. 10, lines 29-32 in terms of control terminal signal) and a power supply terminal (fig. 6, elements 92 “ $\pm 15v$ ”, 10 “ $\pm 5v$ ”, 8 “ $\pm 5v$ ”), said two ground terminals being located at the outermost ends of a row that is different from the row that includes said power supply terminal, and that includes said clock signal terminal (col. col. 7, lines 32-37 in terms of clock signal).

Contact Information

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles W. Stewart, Jr. whose telephone number is (571) 272-2154.

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Charles Stewart, Jr.

March 9, 2005



Stephen D. Meier
Primary Examiner